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Rev 09/03

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

NOTICE OF ALLOWANCE dtd. Sept. 8, 2005  
CONFIRMATION No. 4351

In re patent : Philippe le Helley, et al.  
Application No. : 10/648,983  
Filed : August 27, 2003  
Confirmation No. : 4351  
For : SYSTEM AND METHOD OF CONTROLLING PRESSURE  
OSCILLATIONS OF HYDRODYNAMIC ORIGIN FOR A  
SOLID PROPELLANT THRUSTER  
Examiner : Tae Jun Kim  
Attorney's Docket : BDL-433XX

TC Art Unit: 3746

\*\*\*\*\*  
I hereby certify that this correspondence is being deposited with the  
United States Postal Service as first class mail in an envelope  
addressed to: Mail Stop ISSUE FEE, Commissioner for Patents, P.O. Box  
1450, Alexandria, VA 22313-1450 on November 24, 2005.

By: Beverly E. Hjorth  
Beverly E. Hjorth  
Registration No. 32,033  
Attorney for Applicant(s)

\*\*\*\*\*

PETITION UNDER RULE 1.324 37 CFR 1.324 TO CORRECT INVENTORSHIP

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Petition is hereby made to correct the inventorship of the above-  
identified patent application by the addition of three inventors, as  
follows:

- (1) Marco Telara, a citizen of Italy, whose residence is in Artena  
(Roma), Italy, and whose post office address is Via Valle

11/25/2005 SDENB082 00000024 10648983

01 FC:1464

130.00 OP

- 1 -

ATTORNEY DOCKET NO.  
WEINGARTEN, SCHURGIN,  
GAGNEBIN & LEBOVICI LLP  
TEL. (617) 542-2290  
FAX. (617) 451-0313

dell'Oste, s.n.c., 00031 Ardena (Roma), Italy;

- (2) Paolo Bellomi, a citizen of Italy, whose residence is in Roma, Italy, and whose post office address is Via Pontina 428, 00128 Roma, Italy; and
- (3) Giorgio Mastrangelo, a citizen of Italy, whose residence is in Roma, Italy, and whose post office address is Via San Crescenziario 48, 00199 Roma, Italy.

The failure to include the three above-named inventors was made without deceptive intent, and only surfaced during a review at allowance.

Accompanying this petition are the following:

- 1) Statement Under 37 C.F.R. §1.324(b)(3), the consent of assignee SNECMA PROPULSION SOLIDE (copy of the assignment recorded August 27, 2003, at Reel 014441 Frame 0928 is enclosed);
- 2) Statement under 37 C.F.R. §1.324(b)(1), a statement of the additional inventors, Marco Telara, Paolo Bellomi and Giorgio Mastrangelo; combined with a Statement under 37 C.F.R. §1.324(b)(2), a statement of the presently named inventors, Philip Le Helley, Louis Jacques, Christophe Magniere, Gilles Uhrig, Bernard Bondon, Jean-Claude Tricot, and Didier Boury; and
- 3) New signed Declaration and Power of Attorney.

Granting of this petition and correction of the inventorship of

Application No.: 10/648,983  
Filed: August 27, 2003  
Confirmation No.: 4351  
TC Art Unit: 3746


the above-identified patent application is requested. A check in the amount of \$130.00 for the petition fee is enclosed. In the event any further fee is required in connection with the filing of the present petition, the United States Patent and Trademark Office is authorized to charge such fee to deposit account no. 23-0804.

Being hereby warned that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent, I declare that I am authorized to execute this Petition on behalf of Applicant, that the facts set forth in this Petition, that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true.

Any questions or comments with regard to this petition should be directed to Applicant's representative at the telephone number listed below.

Respectfully submitted,

PHILIPPE LE HELLEY, ET AL.

By:   
Beverly E. Hjorth  
Registration No. 32,033  
Attorney for Applicants

WEINGARTEN, SCHURGIN,  
GAGNEBIN & LEBOVICI LLP  
Ten Post Office Square  
Boston, Massachusetts 02109

Telephone: (617) 542-2290  
Telecopier: (617) 561-0313

CLG:mc/328079-1



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

NOTICE OF ALLOWANCE dtd. Sept. 8, 2005  
CONFIRMATION No. 4351

In re patent : Philippe le Helley, et al.  
Application No. : 10/648,983  
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Box 1450, Alexandria, VA 22313-1450 on November 24, 2005.

By: Beverly E. Hjorth  
Beverly E. Hjorth  
Registration No. 32,033  
Attorney for Applicant(s)

\*\*\*\*\*

STATEMENT UNDER 37 CFR 1.324(b)(3)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

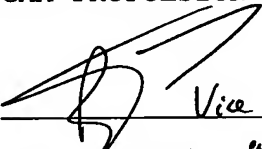
SNECMA PROPULSION SOLIDE, a French limited company, whose place  
of business is at Le Haillan les Cinq Chemins, 33187 LE HAILLAN,  
FRANCE, hereby agrees to the addition of Marco Telara, Paolo Bellomi  
and Giorgio Mastrangelo, as inventors along with Philip Le Helley,  
Louis Jacques, Christophe Magniere, Gilles Uhrig, Bernard Bondon,  
Jean-Claude Tricot, and Didier Boury of the invention disclosed and  
claimed in the above-identified patent application.

Application No.: 10/648,983  
Filed: August 27, 2003  
Confirmation No.: 4351  
TC Art Unit: 3746

Ownership of U.S. patent application No. 10/648,983 is in SNECMA PROPULSION SOLIDE by reason of an assignment recorded on August 27, 2003, at Reel 014441, Frame 0928 in the U.S. Patent and Trademark Office, a true copy of which is enclosed herewith.

Respectfully submitted,

SNECMA PROPULSION SOLIDE

By:  Via Prudent  
Its (title) and CFO

Date: 16/11/05

Witness:

Rosette Bilhé Bilhé

Date: 18/11/2005

CLG/mc/328103-1



Rev 09/03

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

NOTICE OF ALLOWANCE dtd. Sept. 8, 2005  
CONFIRMATION No. 4351

In re patent : Philippe le Helley, et al.  
Application No. : 10/648,983  
Filed : August 27, 2003  
Confirmation No. : 4351  
For : SYSTEM AND METHOD OF CONTROLLING PRESSURE  
OSCILLATIONS OF HYDRODYNAMIC ORIGIN FOR A  
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Examiner : Tae Jun Kim  
Attorney's Docket : BDL-433XX

TC Art Unit: 3746

\* \* \* \* \*

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop ISSUE FEE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 24, 2005.

By: Beverly E. Hjorth  
Beverly E. Hjorth  
Registration No. 32,033  
Attorney for Applicant(s)

\* \* \* \* \*

STATEMENT UNDER 37 CFR 1.324(b)(1) of Marco Telara, Paolo Bellomi and Giorgio Mastrangelo; and

STATEMENT UNDER 37 CFR 1.324(b)(2) of Philip Le Helley, Louis Jacques, Christophe Magniere, Gilles Uhrig, Bernard Bondon, Jean-Claude Tricot, and Didier Boury

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

We, the below-signing, Marco Telara, Paolo Bellomi and Giorgio Mastrangelo, declare that we are inventors along with Philip Le Helley, Louis Jacques, Christophe Magniere, Gilles Uhrig, Bernard Bondon, Jean-Claude Tricot and Didier Boury, of the invention disclosed and claimed in the above-identified U.S. patent application No. 10/648,983 and that any failure to include us as inventors

occurred without deceptive intent on our part.

We hereby declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

By: Marco Telara  
Marco Telara

Date: 28/10/05

Witness:

Davide Sni  
Date: 28/10/05

Respectfully submitted,

By: Paolo Bellomi  
Paolo Bellomi

Date: 3.11.05

Witness:

Mario Bign  
Date: 3/11/05

Application No.: 10/648,983  
Filed: August 27, 2003  
Confirmation No.: 4351  
TC Art Unit: 3746

Respectfully submitted,

By: Giorgio Mastrangelo  
Giorgio Mastrangelo

Date: 03/11/05

Witness:

Angelo Fentura  
Date: 03/11/05

We, Philip Le Helley, Louis Jacques, Christophe Magniere, Gilles Uhrig, Bernard Bondon, Jean-Claude Tricot, and Didier Boury, agree to the addition of Marco Telara, Paolo Bellomi and Giorgio Mastrangelo in U.S. patent application No. 10/648,983 as inventors of the invention disclosed and claimed therein.

Respectfully submitted,

By: \_\_\_\_\_  
Philip Le Helley

Date: \_\_\_\_\_

Witness:

\_\_\_\_\_  
Date: \_\_\_\_\_

Respectfully submitted,

By: \_\_\_\_\_  
Louis Jacques

Date: \_\_\_\_\_

Witness:

\_\_\_\_\_  
Date: \_\_\_\_\_



Application No.: 10/648,983  
Filed: August 27, 2003  
Confirmation No.: 4351  
TC Art Unit: 3746

Respectfully submitted,

By: \_\_\_\_\_  
Christophe Magniere

Date: \_\_\_\_\_

Witness:

\_\_\_\_\_

Date: \_\_\_\_\_

Respectfully submitted,

By: \_\_\_\_\_  
Gilles Uhrig

Date: \_\_\_\_\_

Witness:

\_\_\_\_\_

Date: \_\_\_\_\_

Respectfully submitted,

By: \_\_\_\_\_  
Bernard Bondon

Date: \_\_\_\_\_

Witness:

\_\_\_\_\_

Date: \_\_\_\_\_

Respectfully submitted,

By: \_\_\_\_\_  
Jean-Claude Tricot

Date: \_\_\_\_\_

Witness:

\_\_\_\_\_

Date: \_\_\_\_\_

Application No.: 10/648,983  
Filed: August 27, 2003  
Confirmation No.: 4351  
TC Art Unit: 3746

Respectfully submitted,

By: \_\_\_\_\_  
Didier Boury

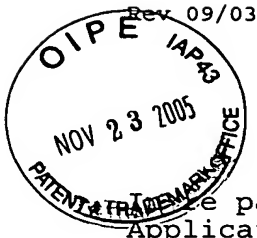
Date: \_\_\_\_\_

Witness:

\_\_\_\_\_

Date: \_\_\_\_\_

CLG/mc/328105-1



Rev 09/03

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

NOTICE OF ALLOWANCE dtd. Sept. 8, 2005  
CONFIRMATION No.4351

Patent : Philippe le Helley, et al.  
Application No. : 10/648,983  
Filed : August 27, 2003  
Confirmation No. : 4351  
For : SYSTEM AND METHOD OF CONTROLLING PRESSURE  
OSCILLATIONS OF HYDRODYNAMIC ORIGIN FOR A  
SOLID PROPELLANT THRUSTER  
Examiner : Tae Jun Kim  
Attorney's Docket : BDL-433XX

TC Art Unit: 3746

\* \* \* \* \*

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop ISSUE FEE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 26, 2005.

By:

Beverly E. Hjoren  
Beverly E. Hjoren  
Registration No. 32,033  
Attorney for Applicant(s)

\* \* \* \* \*

STATEMENT UNDER 37 CFR 1.324(b)(1) of Marco Telara, Paolo Bellomi and  
Giorgio Mastrangelo; and

STATEMENT UNDER 37 CFR 1.324(b)(2) of Philip Le Helley,  
Louis Jacques, Christophe Magniere, Gilles Uhrig, Bernard Bondon,  
Jean-Claude Tricot, and Didier Boury

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

We, the below-signing, Marco Telara, Paolo Bellomi and Giorgio Mastrangelo, declare that we are inventors along with Philip Le Helley, Louis Jacques, Christophe Magniere, Gilles Uhrig, Bernard Bondon, Jean-Claude Tricot and Didier Boury, of the invention disclosed and claimed in the above-identified U.S. patent application No. 10/648,983 and that any failure to include us as inventors

occurred without deceptive intent on our part.

We hereby declare that all statements made herein of our own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

By: \_\_\_\_\_  
Marco Telara

Date: \_\_\_\_\_

Witness:

\_\_\_\_\_

Date: \_\_\_\_\_

Respectfully submitted,

By: \_\_\_\_\_  
Paolo Bellomi

Date: \_\_\_\_\_

Witness:

\_\_\_\_\_

Date: \_\_\_\_\_

Application No.: 10/648,983  
Filed: August 27, 2003  
Confirmation No.: 4351  
TC Art Unit: 3746

Respectfully submitted,

By: \_\_\_\_\_  
Giorgio Mastrangelo

Date: \_\_\_\_\_


Witness:

\_\_\_\_\_  
Date: \_\_\_\_\_

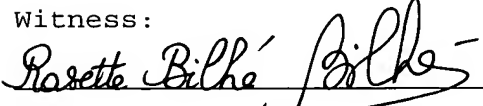
We, Philip Le Helley, Louis Jacques, Christophe Magniere, Gilles Uhrig, Bernard Bondon, Jean-Claude Tricot, and Didier Boury, agree to the addition of Marco Telara, Paolo Bellomi and Giorgio Mastrangelo in U.S. patent application No. 10/648,983 as inventors of the invention disclosed and claimed therein.

Respectfully submitted,

By: \_\_\_\_\_  
Philip Le Helley

Date:  17/11/2005

Witness:

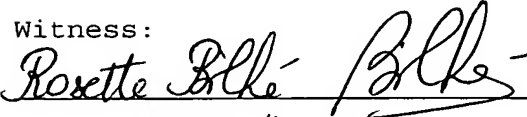
  
Date: 17/11/2005

Respectfully submitted,

By: \_\_\_\_\_  
Louis Jacques

Date:  17/11/2005

Witness:

  
Date: 17/11/2005

Respectfully submitted,

By:   
Christophe Magniere


Date: 17/11/2005

Witness:

Rosette Bilé 

Date: 17/11/05

Respectfully submitted,

By:   
Gilles Uhrig

Date: 17/11/2005 

Witness:

Rosette Bilé 

Date: 17/11/2005

Respectfully submitted,

By:   
Bernard Bondon


Date: 17/11/2005

Witness:

Rosette Bilé 

Date: 17/11/2005

Respectfully submitted,

By:   
Jean-Claude Tricot

Date: 17/11/2005

Witness:

Rosette Bilé 

Date: 17/11/2005

Application No.: 10/648,983  
Filed: August 27, 2003  
Confirmation No.: 4351  
TC Art Unit: 3746

Respectfully submitted,

By:   
Didier Boury

Date: 17/11/2005

Witness:

  
Rosette Bille

Date: 17/11/2005

CLG/mc/328105-1



Attorney  
Docket No.: BDL-433XX

### DECLARATION AND POWER OF ATTORNEY

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

#### **SYSTEM AND METHOD OF CONTROLLING PRESSURE OSCILLATIONS OF HYDRODYNAMIC ORIGIN FOR A SOLID PROPELLANT THRUSTER**

The specification of which (check one):

☐ is attached hereto ☒ was filed on August 27, 2003 as Application No. 10/648,983;  
Notice of Allowance issued, dated September 8, 2005.

☐ was filed as PCT International. Appl. No. \_\_\_\_\_ on \_\_\_\_\_,  
and was amended under PCT Article 19 on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations §1.56.

I hereby claim foreign priority benefits under Title 35, USC §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

	<u>Prior Foreign Application(s)</u>	<u>Date Filed</u>	<u>Priority</u>
<u>Claimed</u>			
<input type="checkbox"/>	<u>02.11301</u> <u>France</u>	<u>12 September 2002</u>	<input checked="" type="checkbox"/>
No	(Number) (Country)	(Day/Month/Year)	Yes
<input type="checkbox"/>	_____	_____	<input type="checkbox"/>
No	(Number) (Country)	(Day/Month/Year)	Yes
<input type="checkbox"/>	_____	_____	<input type="checkbox"/>
No	(Number) (Country)	(Day/Month/Year)	Yes

I hereby claim the benefit under Title 35, USC §119(e) of any United States provisional application(s) listed below:

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)



Attorney  
Docket No.: BDL-433XX

I hereby claim the benefit under Title 35 USC §120 of any United States or International application(s) listed below and insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35 USC §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application No.)	(Filing Date)	(Patented/pending/abandoned)
(Application No.)	(Filing Date)	(Patented/pending/abandoned)
(Application No.)	(Filing Date)	(Patented/pending/abandoned)

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the Attorneys associated with Customer Number 207 to prosecute this application and transact all business connected therewith in the Patent and Trademark Office, and to file with the USRO any International Application based thereon.

The following Attorneys are associated with Customer Number 207:

Stanley M. Schurgin, Reg. No. 20,979  
Charles L. Gagnebin III, Reg. No. 25,467  
Victor B. Lebovici, Reg. No. 30,864  
Holliday C. Heine, Reg. No. 34,346

Gordon R. Moriarty, Reg. No. 38,973  
Beverly E. Hjorth, Reg. No. 32,033  
Richard E. Gamache, Reg. No. 39,196  
Thomas O. Hoover, Reg. No. 32,470

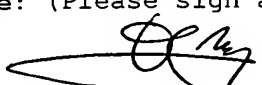
Address all correspondence to:


☒ Customer Number 207

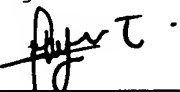
which is associated with the Law Firm of:  
WEINGARTEN, SCHURGIN, GAGNEBIN & LEBOVICI LLP  
Ten Post Office Square  
Boston, Massachusetts 02109  
United States  
Telephone: (617) 542-2290 Fax: (617) 451-

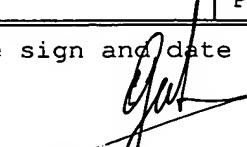
0313

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

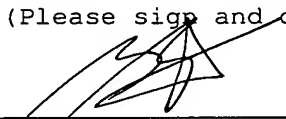
Full Name of First/Sole Inventor: Philippe Le Helley		
City of Residence Pessac	State or Country France	Country of Citizenship France
Post Office Address 9 rue Romy Schneider	City Pessac	State or Country Zip Code France - 33600
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 17/11/2005


Full Name of Second/Joint Inventor: Louis Jacques		
City of Residence Saint Medard en Jalles	State or Country France	Country of Citizenship France
Post Office Address 14 Allée des Pins	City Saint Medard en Jalles	State or Country Zip Code France - 33600
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 17/11/2005


Full Name of Third/Joint Inventor: Christophe Magnière		
City of Residence Merignac	State or Country France	Country of Citizenship France
Post Office Address 6 Square Isatis	City Merignac	State or Country Zip Code France - 33700
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 17/11/2005


Full Name of Fourth/Joint Inventor: Gilles Uhrig		
City of Residence Pyla sur Mer	State or Country France	Country of Citizenship France
Post Office Address 3 Allée Brumaire	City Pyla sur Mer	State or Country Zip Code France - 33115
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 17/11/2005


Attorney  
Docket No.: BDL-433XX


Full Name of Fifth/Joint Inventor: Bernard Bondon		
City of Residence Merignac	State or Country France	Country of Citizenship France
Post Office Address 14 rue Pierre Brassolette	City Merignac	State or Country Zip Code France - 33700
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 17/11/2005

Full Name of Sixth/Joint Inventor: Jean-Claude Tricot		
City of Residence Martignas	State or Country France	Country of Citizenship France
Post Office Address 138 Avenue de Saint Emilion	City Martignas	State or Country Zip Code France - 33127
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 17/11/2005

Full Name of Seventh/Joint Inventor: Didier Boury		
City of Residence Saint Medard en Jalles	State or Country France	Country of Citizenship France
Post Office Address 4 Rue Charles Voisin	City Saint Medard en Jalles	State or Country Zip Code France - 33160
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 17/11/2005

Full Name of Eighth/Joint Inventor: Marco Telara		
City of Residence Artena (Roma)	State or Country Italy	Country of Citizenship Italy
Post Office Address Via Valle dell'Oste, s.n.c.	City Artena (Roma)	State or Country Zip Code Italy - 00031
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 28/10/05

Full Name of Ninth/Joint Inventor: Paolo Bellomi		
City of Residence Roma	State or Country Italy	Country of Citizenship Italy
Post Office Address Via Pontina 428	City Roma	State or Country Zip Code Italy - 00128
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 3.11.05

Full Name of Tenth/Joint Inventor: Georgio Mastrangelo		
City of Residence Roma	State or Country Italy	Country of Citizenship Italy
Post Office Address Via San Crescenziario 48	City Roma	State or Country Zip Code Italy - 00199
Signature: (Please sign and date in permanent ink.) X 		Date signed: X 03/11/05